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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,665	06/30/2000	KAORU NAKABAYASHI	Q58650	1041

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EXAMINER

LEE, TOMMY D

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/529,665

Applicant(s)

NAKABAYASHI ET AL.

Examiner

Thomas D. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-12, 24-27, 33, 34 and 37-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 10, 12, 34, 37, 38, 41 and 42 is/are allowed.
- 6) ☒ Claim(s) 11, 24-27, 33, 39, 40 and 43-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office action is responsive to applicant's amendment filed March 30, 2004. Claims 9-12, 24-27, 33, 34 and 37-54 are pending.
2. The indicated allowability of claims 11, 26 and 33 is withdrawn in view of the newly discovered reference(s) to Watanabe et al. (U.S. Patent 6,344,907). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 24-27 and 45-52 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims recite computer-implemented inventions that are defined as generalized products claiming functionally descriptive material, and as such must reside on a *computer readable* medium or equivalent. A "computer readable medium" is necessary for the product to be statutory because it allows the functionality of the program to be realized. Not all media necessarily impart functionality to a computer, and thus the mere recitation of a medium recording an image data processing program for causing a computer to execute an image processing is non-statutory because the medium itself is not recited as being *computer readable*.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 40, 44, 53 and 54 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,377,359 (Higashio).

Regarding claim 40, Higashio discloses an image data processing apparatus comprising: a parameter setting unit which sets a parameter representing contents of a predetermined image processing to be executed on image data (column 7, line 64 – column 8, line 25); and a data saving unit which saves the image data and the parameter together with relating information (column 8, lines 31-35; column 5, lines 43-54); wherein the parameter setting unit sets contents of an image processing based on a result obtained by statistically analyzing the image data (column 9, lines 27-35).

Regarding claim 44, Higashio discloses an image processing apparatus in which a parameter representing contents of a predetermined image processing to be executed on image data and the image data are saved together with mutual relating information, the apparatus comprising: a data acquiring unit which acquires the image data and the parameter by referring to the relating information (column 5, lines 54-59); and an image processing reproducing unit which obtains image data subjected to the specified image processing based on the acquired image data and parameter (column 9, lines 4-9); wherein the parameter setting unit sets contents of an image processing based on a result obtained by statistically analyzing the image data (column 9, lines 27-35).

Regarding claim 53, Higashio discloses an image processing method in which a parameter representing contents of a predetermined image processing to be executed on image data is set and the image data and the parameter are saved together with relating information (column 8, lines 31-35; column 5, lines 43-54); wherein the image data are statistically analyzed and contents of an image processing are set based on a result of the analysis (column 9, lines 27-35).

Regarding claim 54, Higashio discloses an image data processing method in which a parameter representing contents of a predetermined image processing to be executed on image data and the image data are saved together with mutual relating information (column 8, lines 31-35; column 5, lines 43-54), and the image data and the parameter are acquired by referring to the related information, the image data subjected to the specific image processing are obtained based on the acquired image data and parameter (column 9, lines 4-9); wherein the image data are statistically analyzed and contents of an image processing are set based on a result of the analysis (column 9, lines 27-35).

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 11, 26, 33, 39, 43, 47 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higashio in view of U.S. Patent 6,344,907 (Watanabe et al.).

Regarding claim 11, Higashio discloses an image data processing apparatus comprising: a parameter setting unit which sets a parameter representing contents of a

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predetermined image processing to be executed on image data (column 7, line 64 – column 8, line 25); a data saving unit which saves the image data and the parameter together with relating information (column 8, lines 31-35; column 5, lines 43-54); a data acquiring unit which acquires the image data and the parameter by referring to the relating information (column 5, lines 54-59); and an image processing reproducing unit which obtains image data subjected to the specified image processing based on the acquired image data and parameter (column 9, lines 4-9).

Higashio does not disclose relating and saving thumbnail data of the image data together with the parameter. Watanabe et al. disclose the display of thumbnail images along with processing parameters (column 10, line 17 – column 11, line 34; Figs. 8 and 9). Display of the thumbnail images along with parameters inherently requires that the images be saved, at least temporarily. One of ordinary skill would have been motivated to provide for the saving of thumbnail images and related parameters, as disclosed in Watanabe et al., in an image data processing apparatus such as disclosed in Higashio, since this limitation enables a user to view a processed image before printing, thereby avoiding waste in printing materials if he/she decides not to produce the image after viewing.

Claims 39 and 43 each omit certain limitations of above-rejected claim 11. The remaining limitations are suggested by the combined teaching of Higashio and Watanabe et al., as related above.

Claim 33 recites steps for performing image processing as recited in above-rejected claim 11. These steps are suggested by the combined teaching of Higashio and Watanabe et al., as set forth above.

Claim 26 recites the above steps for performing image processing, recorded on a medium for causing a computer to execute the steps. A computer program for performing image processing steps in general, while not taught by Higashio in view of Watanabe et al., would have been an obvious modification to one of ordinary skill in the art, so that the image processing steps may be performed by a computer without requiring specific hardware for performing each of the steps.

Claims 47 and 51 each omit certain steps of above-rejected claim 26. The remaining steps are suggested by the combined teaching of Higashio and Watanabe et al., as related above.

Allowable Subject Matter

8. Claims 9, 10, 12, 34, 37, 38, 41 and 42 are allowed.

9. The following is a statement of reasons for the indication of allowable subject matter: No prior art has been found to teach or suggest separate use of sets of parameters depending on a situation of a pixel as recited in claims 9, 37 and 41; or dividing the image data and parameter with a hierarchical structure, as recited in claims 10, 38 and 42; or management of image data on a storage device differently from the parameter, as recited in claims 12 and 34.

Response to Arguments

10. Applicant's arguments filed in response to the indicated allowability of claims 9-12, 24-27, 33 and 34, as set forth on page 14, lines 4-8, of applicant's amendment have been fully considered but they are not persuasive with respect to new claims 40, 44, 53 and 54. These claims recite the limitations of claims 13 and 35, which were rejected as being anticipated by Higashio in the prior Office action.

Conclusion

11. In view of new grounds for rejection not necessitated by amendment, this Office action is non-final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas D. Lee whose telephone number is (571) 272-7436. The examiner can normally be reached on Monday-Friday (7:30-5:00), alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas D. Lee
Primary Examiner
Art Unit 2624

tdl
July 6, 2005